

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.-4. (Cancelled)

5. (Previously Presented) A computer implemented method for classifying objects, the method comprising the steps of:

executing computer instructions to identify properties of objects;

executing computer instructions to input data corresponding to identified properties of objects to be classified;

executing computer instructions to formulate a query to identify objects having properties of interest, wherein the query takes into account:

properties that best define the query, wherein the properties that best define the query constitute a signature characteristic of an object collection that is known to belong to a particular class of interest, and further wherein the properties constituting a signature characteristic are determined utilizing an expression that best defines the object collection; and

a desired form of output, wherein the query is manipulated to produce different forms of output based on the desired form of output;

executing computer instructions to select properties of the objects to compare with object properties included in the query;

executing computer instructions to determine if the object belongs in the query based on the selected properties; and

executing computer instructions to obtain a result yielded by the arrangement for determining if the object belongs in the query.

6. **(Previously Presented)** The method of Claim 5, wherein the selection of properties of objects to compare with object properties included in the query is made in conjunction with a determination of a boolean expression of the properties.

7. **(Original)** The method of Claim 6, wherein the boolean expression is an optimized expression of the expression that best defines the query.

8. **(Previously Presented)** The method of Claim 7, wherein the optimization of the boolean expression is accomplished by minimizing the error of the expression which defines the query.

9. **(Cancelled)**